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# This workshop was developed with funds from:

- ☐ The Public Health Emergency Preparedness and Response Program of Montgomery County Maryland, Department of Health & Human Services, and
- ☐ The Montgomery County Child Care Resource and Referral Center (MCCCR&RC)
- ☐ This workshop is based on information from the Department of Maternal & Child Health, University of Carolina/Chapel Hill

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Introduce the training. This training is sponsored by the Public Health Emergency Preparedness and Response Program of Montgomery County Maryland, Department of Health and Human Services, in partnership with the Montgomery County Child Care Resource and Referral Center.

Collect pre-test within 10 minutes. Remind participants that they do not need to answer every question correctly, that the purpose of a pre/post test is to assess their growth throughout the course of the training, so no need to be anxious!

	Housekeeping	
	☐ Emergency Exits	
	☐ Cell Phones/Texting	
	☐ Credit Issuing	
	☐ Pre Test	
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Remind participants to sign-in and all pre-test should be collected at this point. Remind participants of housekeeping and ground rules at trainer discretion. Let participants know that everyone will get credit for three (3) hours, if they receive 75% or better on their post-test, credit will be issued under COK area of health/safety/nutrition; participants with scores of 74% or less will receive clock hours for participating only.

No sign ins allowed 10 minutes after official start of the workshop. Participants may sit in, but will not receive credit.

Pre-tests will not be given to participants arriving more than 10 minutes late. No taking calls or text-messaging during the workshop.

Session is divided into two topics: understanding the clinical aspects of influenza and the considerations to make to continue operations of your program in the event of a pandemic outbreak.



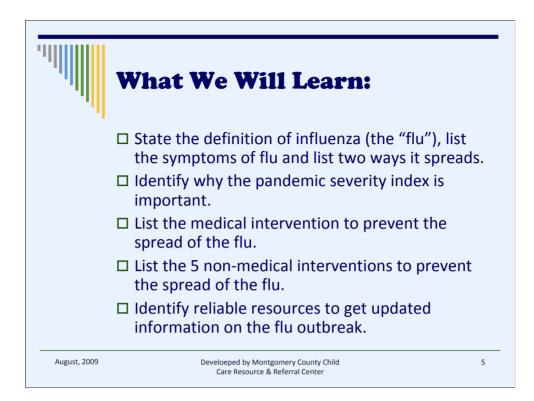
# Part 1: Pandemic Influenza



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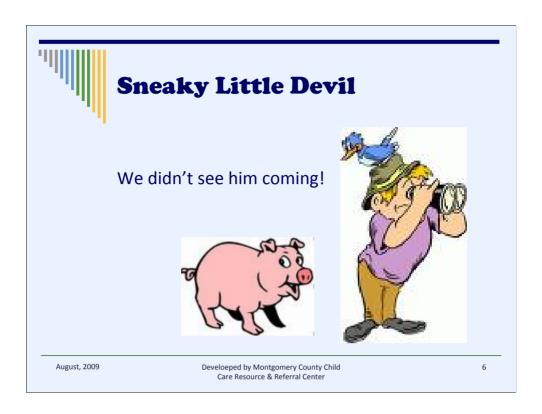
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The information presented today is dependent upon the assumption that the H1N1 flu that will circulate this fall will basically resemble the flu we saw in the spring of 2009 in how it is spread, who is most vulnerable and affected and the severity of the associated illness. If the nature of the virus changes the challenges we will face will change and our recommended responses will change.

Group Activity: Instruct participants to look at the person next to them. Each is to tell the other one thing they know about pandemic flu and COOP and one thing they would like to learn about pan flu and COOP. Randomly ask several participants to tell the group what they had told their neighbor. Write the answers on the flip chart.



We have been diligently monitoring avian (bird) in Asia and this little piggy snuck right up on us. H1N1 contains 4 flu viruses, 2 swine, 1 avian and 1 human.

It is very important to understand that all information and recommendations about H1N1 is based on our limited knowledge of the virus and how it is effecting people.



# **Definition of the Flu**

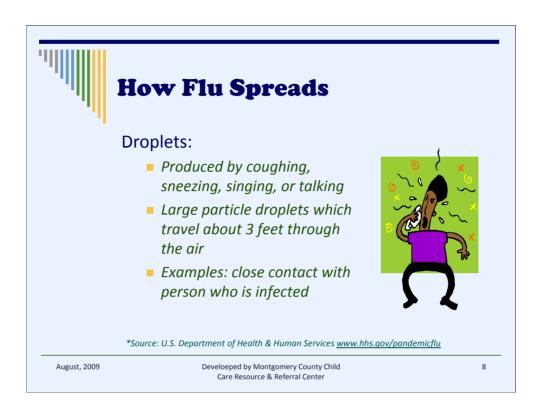
☐ The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death.



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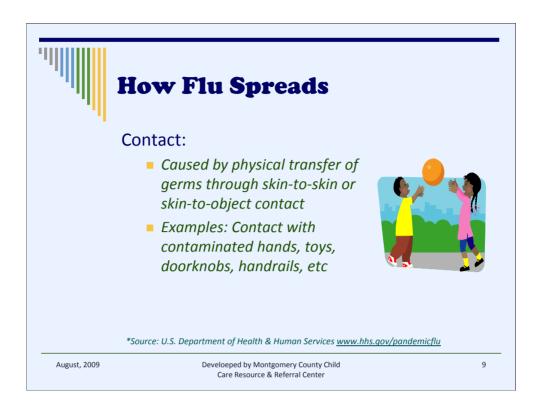
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Stress that the flu a a respiratory illness. Although some people may have some vomiting and diarrhea with the flu it is primarily a respiratory illness. What our mothers call the" stomach flu" is not influenza.



#### Reinforce:

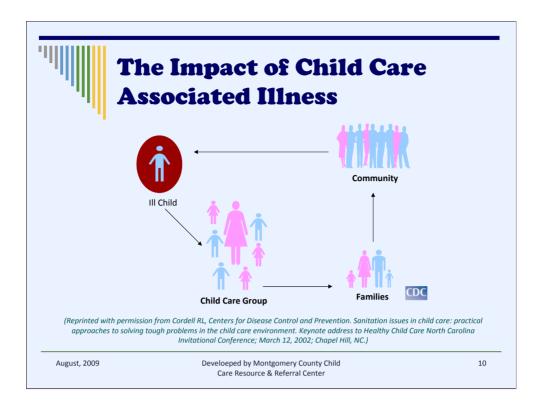
- Airborne droplets generally travel up to 3 feet and then fall to a surface.
- This is the reason the children's sleeping surfaces need to be at least three feet apart.
- The CDC has recommended that that distance be doubled to six feet when dealing
  with a ill person. This is not because it causes greater illness it is because most
  people have absolutely no immunity to this virus.
- You can inhale the droplets directly.



You can pick up the germs from objects such as telephones, computer keyboards, toys, door knobs that have been contaminated by an infected person. The virus can live on a surface for up to 8 hours.

The germs can then be transferred on your hands or other objects to your month, nose or eyes leading to infection.

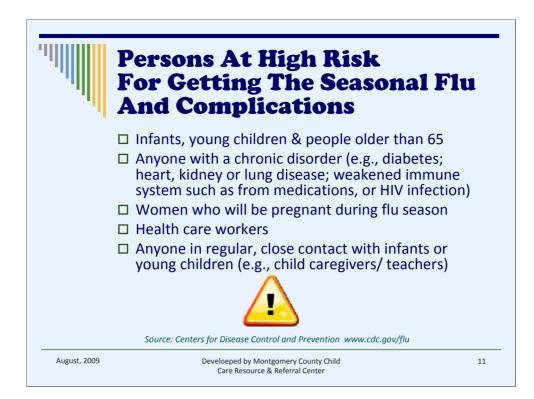
We self inoculate with our hands when we put our contaminated hands in our mouths, eyes or nose.



We are all very aware that young children in group care have a considerably higher incidence of common infectious disease because of their age appropriate behaviors. Children frequently have the highest attack rate during a community outbreak of flu and serve as a major source of transmission with in the community.

This illustration depicts why child care is at the core of community outbreaks.

One ill child can be expected to infect 50% of his contact in the child care setting. Those infected children can be expected to infect 50% of their house hold contacts who in turn take the infection into the community.



This is true for the seasonal flu. With H1N1 we are seeing the greatest number of cases in the 4 to 24 year old group with an out of proportion number of deaths in pregnant women. Approximately 1% of our population is pregnant but 6% of the deaths attributed to H1N1 have been in pregnant women. The over 65 group, thus far, seems not to be getting the infection at the same rate as it is infected by the seasonal flu. The thought is that this age group may have some immunity from flu that circulated early in their lifetime.

Please note that even for seasonal flu child care providers are in the high risk category

Signs & Symp	toms of the Flu				
☐ Fever (as high as	□ Extreme tiredness				
103°F to 105°F in	☐ Earache*				
children)	□ Nausea and/or				
☐ Cough	vomiting*				
□ Sore throat	☐ Diarrhea*				
□ Headache					
□ Muscle ache	*observed more often in children than adults				
Source: Centers for Disease Control and Prevention <a href="www.cdc.gov/flu">www.cdc.gov/flu</a>					
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With H1N1 we are seeing more vomiting and diarrhea then we usually see.



Symptoms	Cold	Flu	Allergies
Symptom Onset	Gradual	Sudden	Varies
Fever	Rare	Characteristic,102-104	Never
Body aches& pains	Slight	Usual, often severe	Never
Fatigue, weakness	Mild	Can last 2-3 weeks	Sometimes
Extreme Exhaustion	Never	Early, prominent	Never
Stuffy nose	Common	Sometimes	Common
Sneezing	Usual	Sometimes	Usual
Sore Throat	Common	Sometimes	Sometimes
Chest congestion, cough	Mild to moderate, hacking	Common; can become severe	Sometimes

Adapted from various documents: U.S. Department of Health and Human Services, NIH, N.I.A.I.D & FDA

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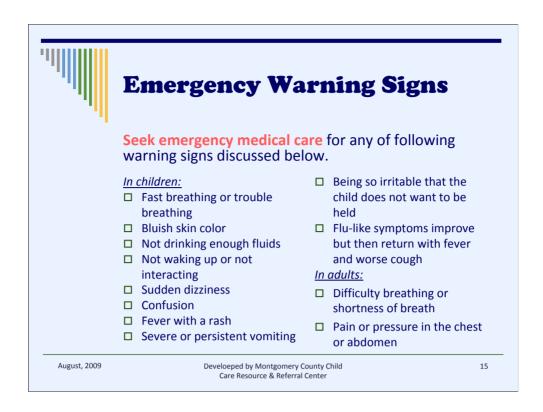
The Centers for Disease Control define influenza like illness as a fever with a cough and/or a sore throat in absence of any other known cause. On the hand out you can also see a comparison of other common symptoms seen in the flu, a cold and an allergy.

Remember this is a new virus to us and these symptoms can change.

	Complications of the Flu					
	□ Pneumonia					
	☐ Ear infections					
	☐ Sinus infections					
	□ Dehydration					
	☐ Worsening of chronic medical conditions					
	□ Death					
	Source: Centers for Disease Control and Prevention <u>www.cdc.gov/flu</u>					
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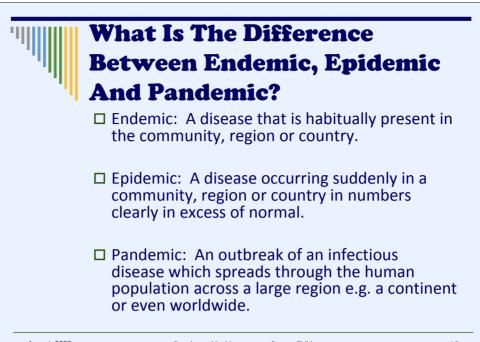
Handout: Emergency Warning Signs in Children and Adults

Point out that the majority of deaths related to H1N1 have occurred in persons with complicating medical conditions such as pregnancy, asthma, etc



Please refer to your handout on Emergency warning signs.

These warning signs are true for the flu but they are also generally mean that an individual needs to seek medical care.



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Lets just clarify some terms that you have been hearing since this pandemic began.

Endemic example is malaria in certain African regions .

Epidemic example could be seasonal influenza in Maryland.

Pandemic example is Spanish flu. plague, smallpox and of course H1N1

Any infectious disease can present in any of these three ways and can move from category to another..



## **Antigenic Drift or Shift**

## □ Antigenic Drift

- Occurs in both A and B Influenza Viruses
- Small, gradual mutation

## ■ Antigenic Shift

- Abrupt major change which produces a novel influenza A
- Results in a new human influenza A subtype

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Flu Viruses mutate (change) as they go through the susceptible population. They can change In two ways.

The antigenic drift is a small gradual change that occurs in both influenza A and Influenza B. It usually is not as severe because some of the populations will maintain some immunity to it. The drift is what makes it is necessary to get a flu shot every year.

The shift is a major which produces a new influenza A which results in a new human influenza A. The problem here is that the vast majority of people will have no immunity to this virus so the attack rate is extremely high.

Shift is what we have experienced with H1N1



# What Are The Differences Between Seasonal Flu And Pandemic Flu?

#### Seasonal influenza

- □ Occurs every year
- ☐ The type of flu people are accustomed to so they usually have some immunity build up from previous exposures
- Healthy adults usually not at risk for serious complications
- Vaccine available

#### Pandemic influenza

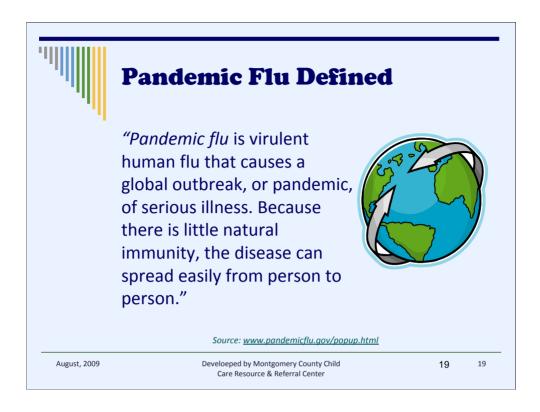
- ☐ Occurs rarely (only 3 in 20<sup>th</sup> century)
- Worldwide outbreak of a new human flu virus so people have little or no immunity
- ☐ Healthy people may be at increased risk for serious complications

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Normal seasonal flu outbreaks are caused by a specific flu viruses every year. This virus is typically more severe than the common cold and can sometimes lead to pneumonia or even death (especially in the elderly population and those with severely low immune systems). Typically, there are 200,000 to 300,000 cases of flu in a year with 30,000 to 40,000 deaths, most of these occur in the elderly or otherwise medically compromised. There aren't more cases or deaths because most healthy persons have built up some type of immunity from previous years of being exposed to the flu virus. For information on finding the seasonal flu vaccine, go to www.findaflushot.com or contact Montgomery County Immunization Program at 240-777-1050.

A pandemic influenza occurs rarely and is caused by a new virus to which humans have little or no immunity built up. Healthy young people may be at an increased risk for serious complications because this group must work, therefore they are out in the environment more, exposing themselves to more people, as well as, holding the belief that they aren't or won't get sick. They also fail to heed the warnings about not going to work when they are sick and spread the infection in the workplace.



Note the word pandemic. A pandemic is a virulent infectious disease that causes a global out break of any particular infectious disease.

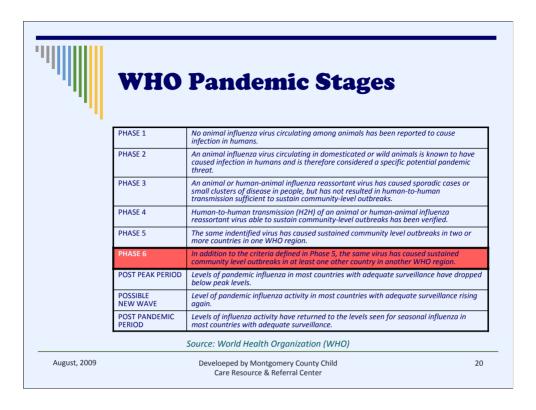
#### Large group activity:

Have participant name other historical pandemic outbreaks

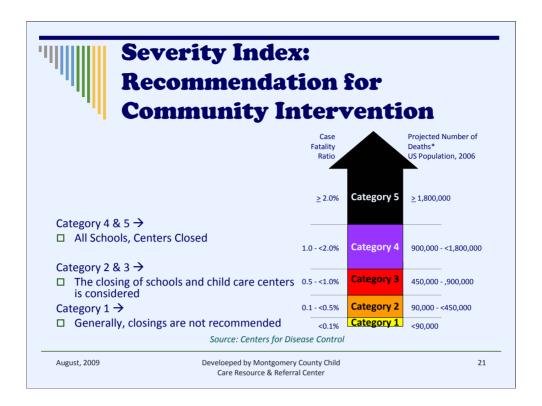
- HIV/AIDES
- Plague
- Smallpox
- Yellow fever

Have participant name concerns about possible future pandemics

- Viral hemorrhagic fevers
- SARS
- Antibiotic resistance



World Health Organization's pandemic stage refers to how widely and infectious disease has spread and how may case have been confirmed in each of the regions of the world. It doe not refer the the severity of the illness.

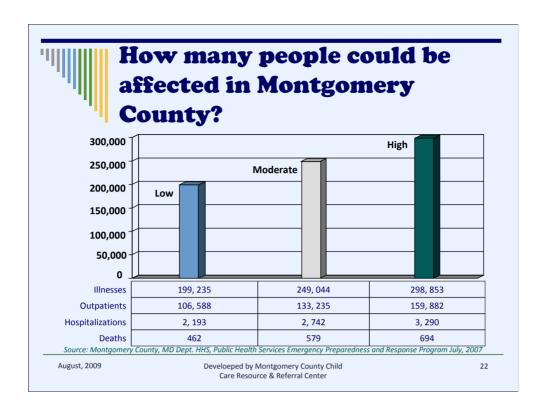


The severity index refers to the case fatality rate (the percentage of people with the illness who are dying0 It is the severity index that dictates community action

We are currently at between level one and two. To my knowledge at this time there is no thought of closing schools or child care.

The severity index is important because

- Estimates the severity of a pandemic
- Directs recommendations for non-medical community interventions to limit the spread of disease



A pandemic could be very mild where only about 25% of the population may get the flu or it could be very severe where maybe 45% get the flu. This is how it could look in Montgomery County, Maryland. Guide for dealing with a pandemic:



## **Medical Strategies**

#### □ Vaccination

- H1N1-expected to be available October 2009.
- Seasonal- absolutely paramount for those in contact with young children

### ☐ Antivirals (oseltamivir [Tamaflu], zanamivir)

May decrease the severity and duration of symptoms

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Before we talk about strategies here it is important to now that CDC can only make recommendations. The CDC has no enforcement powers. That lies with the federal, state and local HHS

Why is it so important to get both vaccines this year?

Vaccination is our number one defense against the flu.

Anybody in close contact with infants less that 6months old has a responsibility to get protected from the flu to keep from bringing the flu to young infants who are not able to receive the vaccine.

- Increased morbidity and mortality
- Possible reallignment of the viruses to make a third virus.

See handout on vaccination recommendations.

All of the vaccination timing and recommendations are still not solid. However it appears that healthy adult are developing adequate anti bodies from one dose if H1N1 vaccine.

We seen limited resistance to Tamaflu in some cases.



# **H1N1 Vaccination Recommendations**

- 1. Pregnant women
- 2. Caregivers of children less than 6 months of age
- Health care and emergency medical personnel
- 4. Healthy children and young adults 6 months to 24 years
- 5. Person 25 through 64 at high risk (asthma, diabetes, Etc)

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### Hand Out CDC Flu Vaccine Facts and Myths

These recommendations from ACIP are based on the following assumptions:

- Severity of illness is unchanged from what has been seen
- Risk groups affected by this virus do not change significantly
- Vaccine testing suggests safe and efficacious product
- Adequate supplies of vaccine can be produced
- No major antigenic changes are evident that would signal the lack of likely efficacy of the vaccines being produced
- Check www.earlychildhoodservices.org for information on where to get a vaccination.



# Non-Medical Techniques to Reduce the Spread of Pandemic Flu

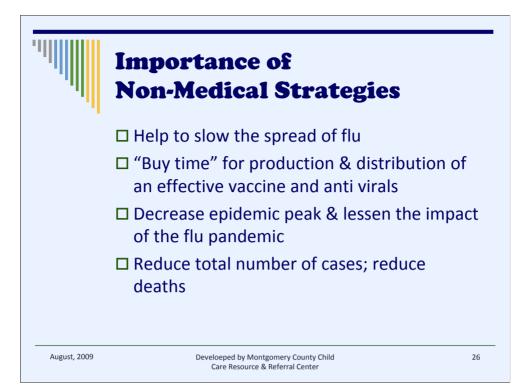
- 1. Respiratory hygiene
- 2. Hand hygiene
- 3. Clean environment
- 4. Exclusion/Isolation
- 5. Crowd reduction/Social distancing

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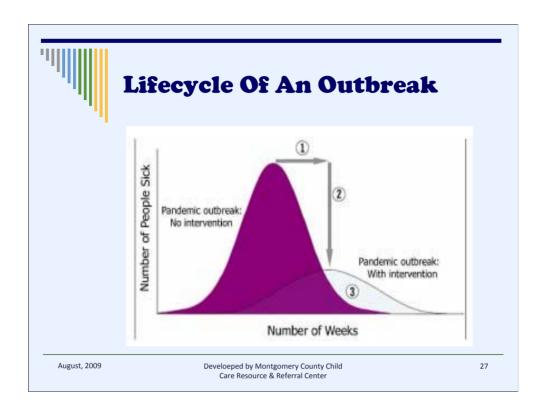
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We cannot stop the spread of the flu but we hopefully can decrease it and slow it down

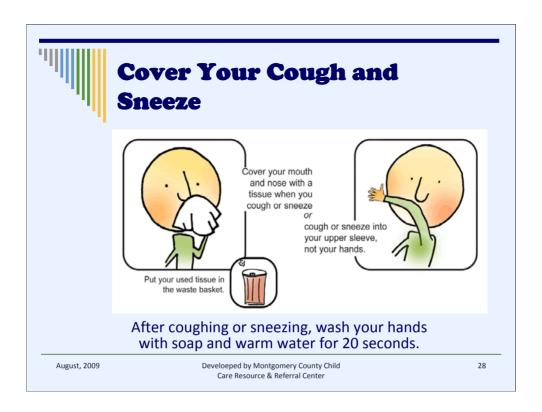
Handout the illness log and discuss it. It is not a requirement that you keep track of absentees or report H1N1 to the health department bu this log may help you keep track of what is happening in your program.



If the illness is non-stopable why take these actions?

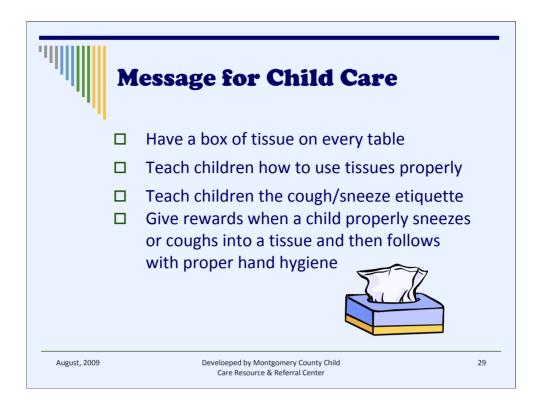


H1N1 is here and we will not be able to stop it so our emphasis is on managing it to lessen the impact. What we are aiming for is to avoid this high sudden peak and try to keep the cases a a lesser number over a longer period of time. This stretching out of cases will help to allow our medical infrastructure to keep up with the demand for example for ICU respiratory beds.

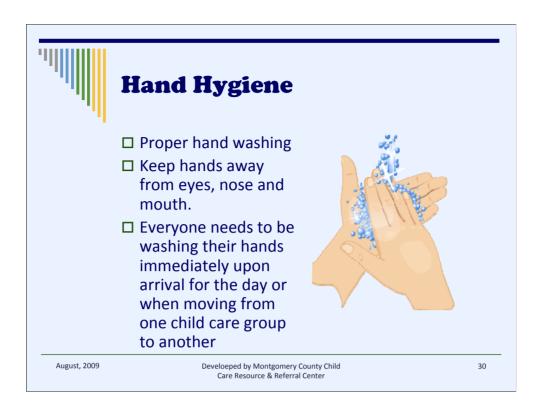


Hand out "Cover Your Cough"

Again we are back to the bare basics but this is where prevention takes place



Don't have to go across the room for tissue. If the cost is a problem you can do what the schools do and ask each family to donate a box of tissues.



We all inadvertently touch surfaces such as a door knob, a table, a telephone. Remember the virus can live on a surface for up to eight hours. Who coughed on it or handled it last with contaminated hands? By touching your eyes, nose mouth you self inoculate through your mucus membranes.

As always hand washing is your best defense. All children and providers should be washing their hands upon arrival before touching anything in the program and when they move from one group to another along with all of the other designated times..

Also those who are caring for infants absolutely must use a barrier between the infant and their shoulder when burping, comforting, or just holding an infant.



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If used in a child care setting, such as during field trips when running water is not available, the sanitizer must be kept out of the reach of the children.

Alcohol hand sanitizers do not replace hand washing but are an alternative when running water is unavailable.

Explain to participants: Different hand sanitizer have different directions so each bottle must be read and the product used according to the manufacturers instructions.



Handout the leaning and Sanitizing Chart

Remember that when an infected person coughs. sneezes, talks, sings the virus is put into the air in large airborne droplets that fall to a surface within about 3 feet. Keep your area clean and sanitized and your hands away from your face.



# **Proper Cleaning and Sanitizing**

- ☐ Clean with soap/detergent and water. Remove all visible dirt. Rinse.
- ☐ **Sanitize** by spraying sanitizer until surface is glossy.
- □ **Leave** sanitizer on surface for **two minutes of contact**. Then air dry or wipe dry with a paper towel.

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You all should be well aware of this by now.



## To Exclude or Not to Exclude?

Who will make a decision about whether a **child** who is acutely ill can receive care in the child care program?

"The child care provider, not the child's family."



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Please see the handout "the Daily Health Check"

During this pandemic flu outbreak the exclusionary criteria may of necessity be stricter than at normal times and it may change in response to a change in circumstances such as the severity of the flu of the number of cases.

You, the provider, need to keep informed of what the recommendations currently are. Use the CDC, Maryland and Early Childhood Services Web site listed at the end of this presentation to keep informed. Major occurrences will be emailed to you, so keep your email current with us.

CDC is recommending, and the county is in agreement, that a member of the general population or a student diagnosed with H1N1 or with influenza like illness be excluded from the program for 24 hours after the cessation of the fever without fever reducing medications. This holds true with or without anti viral medications. The guidelines for child care are in the CDC toolkit <u>Preparing for the Flu (Including 2009 H1N1 Flu)</u> Please monitor your resources at the end of this presentation for changes. This may change so it is important to keep checking your resources that are provided in this presentation.

Remember that you are focusing on the symptoms of pandemic flu; largely respiratory symptoms. People with the flu usually feel pretty badly so it is rather obvious they need to go home. Prompt identification and separation are very important. Separate them from the group ASAP to limit contact with non-infected people.



Divide participants into group of four or five

Pass out scenarios

**Discuss** 



# Crowd Reduction/Social Distancing

- ☐ Dismissal of students from school public private, and universities and colleges for up to 12 weeks
- ☐ Cancellation of school based activities
- ☐ Community distancing to include reduction in out-of-school and community mixing

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This is also known a community mitigation which refers to actions federal, state and local governments must take to prevent the spread of disease.

Social distancing is meant to minimize the kind of social contact that enables virus to transmit.

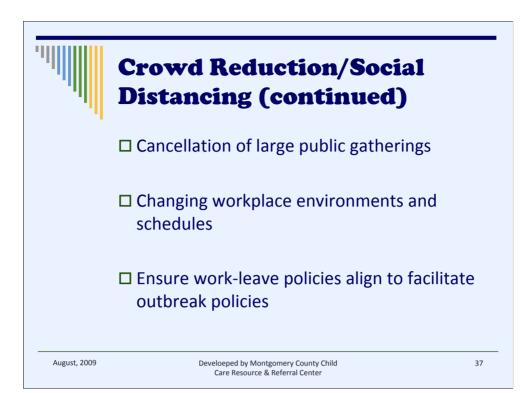
At this time closure is not highly probable but it is highly recommended that you have plan for that eventuality.

The dismal of school and child care can certainly lead to problems. If child care is closed parents should not bring their children to their workplace. Nor should children be left unattended. Now is the time to discuss with your parents that they need to have back plans in the event that the program needs to close.

A suggestion may be made for parents to arrange activities for their children at home possibly with the support of two or three other families.

Closure will depend on the severity of the outbreak. There is always the possibility that you or a family member (FCC) or (center) so many staff become ill and you cannot remain open. These measures may be only applied to large and small centers while FCC with 6 or less children may be able to continue operations.

All is situational Much is dependent on the availability of vaccine



This would include such things as a church, sport events, the "mall", Target, grocery stores, etc

Because we are already seeing resistance to the antiviral and it will take time to immunize the entire country the infection control measure used by the public may be critical in slowing the spread of the virus.

### Avoiding handshakes

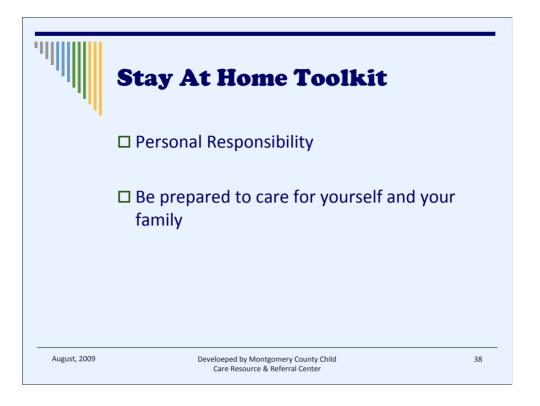
Child care may cohort children and staff. This entails keeping the same small group of children together with the same staff member.

Avoid lunchroom rush

Substitute tele-conferencing for face to face

Use larger conference rooms

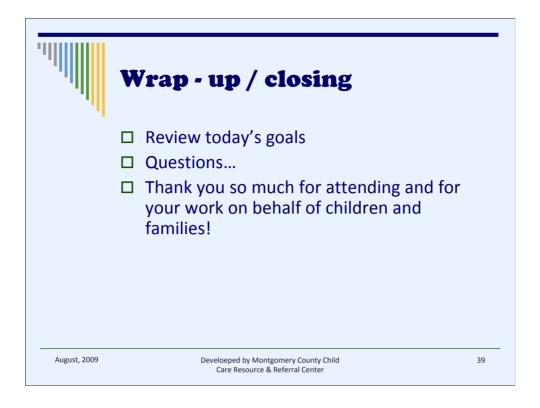
Avoid using a communal computer, telephone, keyboard



Handout: <u>Stay At Home Toolkit</u> or refer the participants to the Montgomery County Md web site, type Stay at Home Toolkit in the search box.

## Briefly review

Take away: I don't want to be standing next to you it CVS while you cough and spread the virus all over the place.



#### Discussion:

- Summarize the key concepts and objectives from the training session.
  - Explore the benefits of the COOP process
  - Learned about the elements of constructing a COOP, through the specific lens of a pandemic flu outbreak.
  - Explored each of the eight phases and now you will each have the tools you need to return to your center or family child care home and collaboratively develop a COOP with your stakeholders.
- Check back in with the "I want to know" flip chart. Are there questions that were not answered? If so, collect them and let participants know that the answers can be found and will be...
- Administer the post-test and give participants the evaluation.
- Thank the participants for their time and for their commitment to training in order to improve the way that they do business on behalf of children and families.



## **Additional Resources**

Maryland Department of Health and Mental Hygiene; www.marylandfluwatch.org
 Novel H1N1 Flu (Swine Flu) and You; Centers for Disease Control and Prevention; www.cdc.gov/h1n1flu/
 www.findaflushot.com
 Pandemic Flu and Child Care Training. Department of Maternal and Child Health, University of North Carolina at Chapel Hill.
 Pandemic Influenza Mitigation U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
 Stay At Home Toolkit for Influenza. Montgomery County Department of Health and Human Services.

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